Stuff You Need To Know About Tobacco & Readiness!

Quit For Yourself!

Active Duty Military Are 6x More Likely To Give Up Tobacco Than Civilians!

Quit for

your family

your health

your kids

your budget

your strength

your friends

your readiness

your unit

your country

Tobacco and the Warfighter

- Decreased ability to deal with stress
- Decreased fine motor coordination
- Decreased stamina
- Increased foot blistering
- Increased risk of PTSD
- Increased need for water
- Decreased lung capacity
- Decreased wound healing
- Increased injuries
- Decreased mental acuity
- Decreased Night Vision

Are you compromising the mission?

Poster based on original design by Major Renee Ponce, Army CHN (July 2003)

Tobacco & Readiness

- **Decreased night vision**
  - Overall, tobacco use is the leading cause of all kinds of blindness in the US
- **Decreased lung capacity**
  - If you smoke, you cant breathe very well
- **Decreased wound healing**
  - 6X more likely to get an infection
  - More likely to have scarring
  - 2X as long for a broken bone to heal
- **Increased foot blistering**

Tobacco & Readiness

- **Increased injuries**
  - Rotator cuff injuries
  - Torn ligaments
  - Back sprains
- **Decreased stamina**
- **Decreased fine motor coordination**
- **Increased need for water – especially when mixed with high caffeine drinks**

How Does Tobacco Increase My Stress?

- The physical components of stress include:
  - Increase in adrenaline in the body,
  - Increase in heart rate,
  - Increase in blood pressure,
  - Increase in blood sugar.
- New research shows that nicotine CAUSES your body to release MORE adrenalin, making you even more stressed out!
- *Also, long term high levels of stress cause your lung function to decrease so the longer you stay stressed out, the worse your breathing gets.*

STRESS!!!!!!!!!!!!!

- Think of stress as running the engine of your car in high gear all the time.
- What does it do to your car?

Stress!!!!!!!!!!!!!

- Stress not only changes your brain's chemistry, but it changes the structure as well!
- ***Stress causes the part of your brain that deals with memory to shrink and change.***
- That's why your memory fails and you forget things when you are stressed out.

STRESS!!!!!!!!!!!!!

- **It is a myth that tobacco reduces your stress!**
- What tobacco does is it eliminates the symptoms of withdrawal so you feel better.
- It releases endorphins so you feel better at that very moment.
- Also, by going outside to smoke, it removes you from the situation that is stressing you

Stress!!!!!!!!!!!!!

- When you are stressed, your body normally releases **serotonin** to combat the stress – nicotine blocks serotonin so you are **more stressed.**
- Then you get cravings for nicotine so that you get a release of endorphins and feel better right away.
- This is only a temporary fix and in the long run the stress is still there.

STRESS!!!!!!!!!!!!!

- Finally, nicotine stops the release of insulin.
- This means that the nicotine:
  - spikes your blood sugar
  - Releases adrenaline (so more blood sugar & more cravings for more nicotine)
  - Blocks insulin so your body can't break the sugar down and it stays in your blood stream keeping your blood sugar high.

PTSD & Tobacco

- **People who are exposed to combat and use tobacco have double the risk of developing post traumatic stress disorder (PTSD).**
- **The signs of PTSD include:**
  - Persistent frightening thoughts and memories of their ordeal.
  - *Feeling detached or numb.*
  - Repeatedly relive the trauma in the form of nightmares and disturbing recollections during the day.
  - *Experiencing sleep problems.*
  - Depression.
  - *Being easily startled.*
  - Lose interest in things they used to enjoy.
  - *Have trouble feeling affectionate.*
  - Feel irritable.
  - *Be more aggressive than before, or even violent.*

PTSD & Tobacco

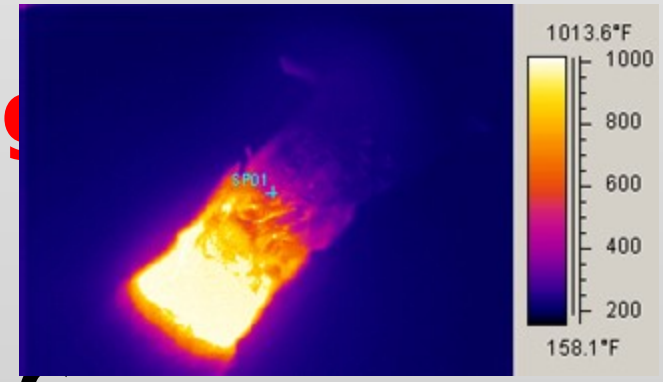
- **PTSD can also lead to physical changes such as:**
  - *More overall body pain.*
  - *Worse physical functioning.*
  - *Headaches.*
  - *Indigestion.*
  - *Cardiovascular disease*
  - *Musculoskeletal diseas*
  - *Skin disease.*

People, landscape and lit cigarette in moonlight. In a SWIR image, people can be clearly seen by starlight and from the light of a lit cigarette butt on the ground in foreground.

- **A lit cigarette can be seen at 2 miles on night vision**
- **A puddle of spit can be seen for 15 minutes on the ground**

So Why Is A Cigarette Butt Lit Up Like That??

- Temperature without drawing:
  - Side of the lit portion: 400 deg C (or 752 deg F)
  - Middle of the lit portion: 580 deg C (or 1112 deg F)
- Temperature during drawing:
  - Middle of the lit portion: 700 deg C (or 1292 deg F)



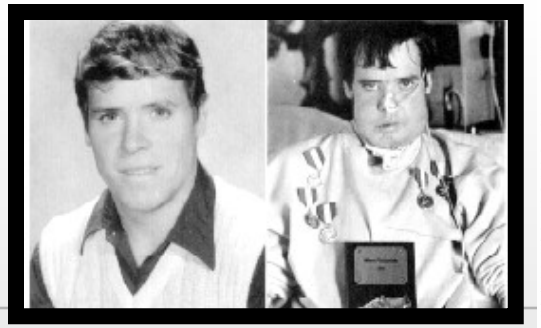
Thermal IR image of a lit cigarette

Thermal image of a machine gun being fired

Chemical Properties

- 4,000 chemicals have been identified in tobacco, including……
- Nicotine, carbon monoxide, acetaldehyde, benzene, arsenic, **salt-peter**, nickel, chromium, cadmium, thorium, polonium, radium, formaldehyde, ammonia, acetone, lead, urethane, vinyl chloride, urea etc. !
- Over 60 of the chemicals in tobacco are known carcinogens and many more bind to the carcinogens to make them even worse.

Chemical Properties



- *Some of the chemicals added to tobacco, like sugar, ammonia & urea, cause the nicotine to 'free base' so that it is absorbed faster and becomes more addictive!*
- 'Free base' means that the nicotine goes directly from a solid chemical to a gas in your lungs and then instantly to your brain.
- *Acetaldehyde is added to the tobacco to also enhance its addictive properties. It is also a sedative.*

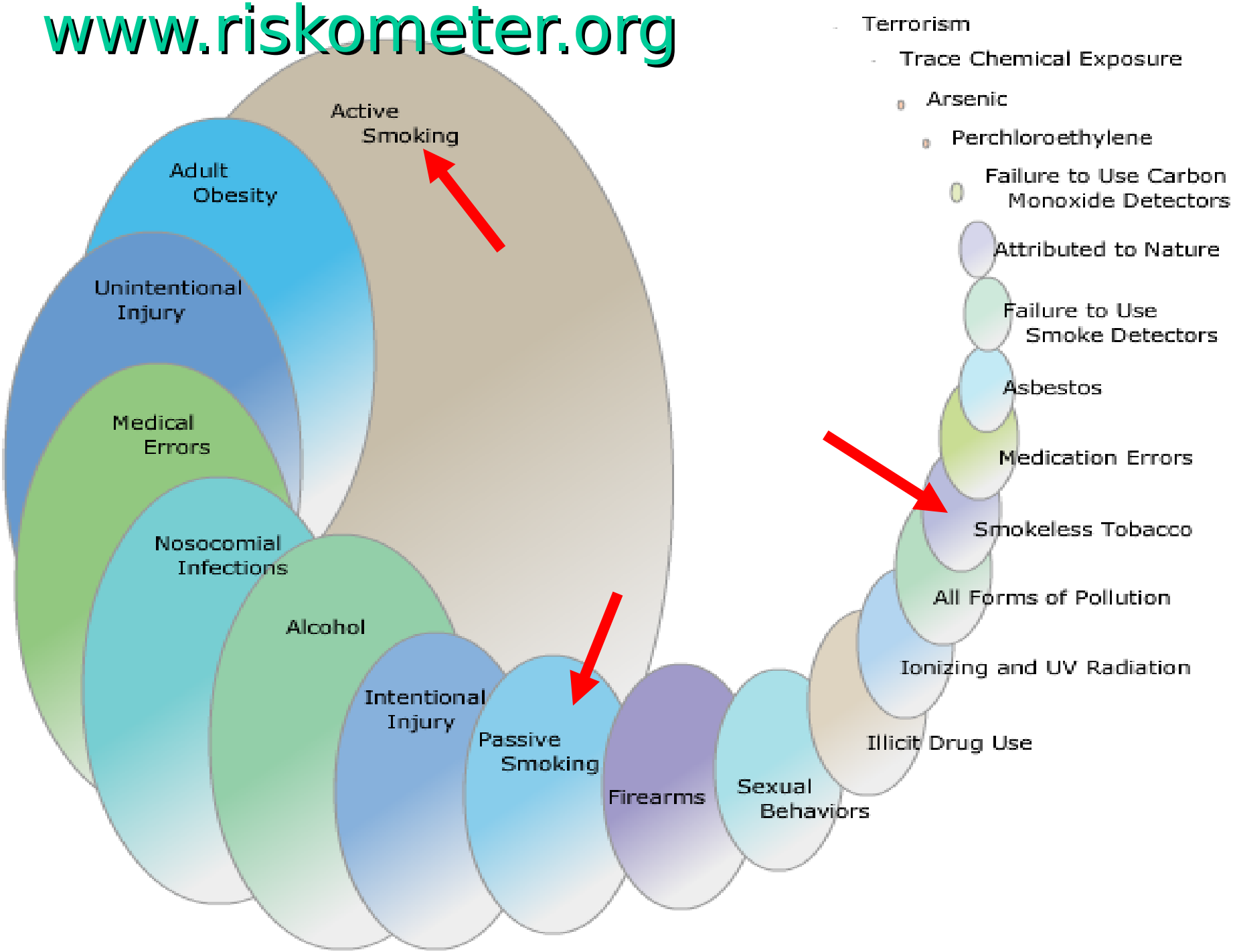
Death And Disability

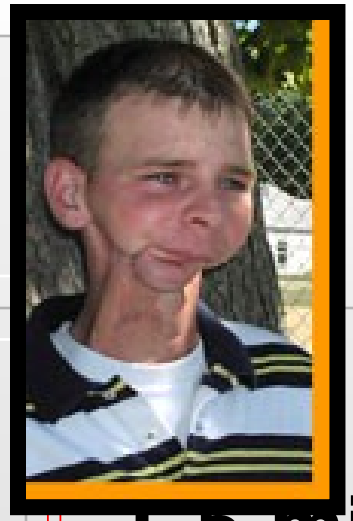
- 40% of all deaths over the age of 45 are tobacco related.
- *The 4 leading causes of death in individuals over age 45 are heart attack, cancer, stroke & chronic obstructive pulmonary disease.*
- **Half of all tobacco users are dead by age 55!**
- 3,000 adult lung cancer deaths per year due to second hand smoke, 50,000 total deaths (cancer, heart disease, etc).
- 1,500 burn deaths & 3000 critically injured.
- *#1 cause of fire deaths in the US*.

Death And Disability

- 43,000 kids are orphaned each year due to tobacco related deaths.
- **1 in 10 miscarriages are due to tobacco use.**
- Four times more babies *die* to mothers who smoked while pregnant than to those who did not smoke while pregnant.
- There are 2,300 SID's deaths in the US every year that are due to second hand tobacco smoke alone.
- ***1 in 10 deaths in infants under 1 year of age are tobacco related.***
- There are over 6,000 deaths every year in the US of children under age 5 that are directly related to second hand smoke.

www.riskometer.org





Tobacco & Fitness Scores

- 1.5 mile for men under age 30:
- NS 11 min 20 sec
- SM 12 min 50 sec

- 1.5 mile for men over age 30:
- NS 12 min 20 sec
- SM 15 min 15 sec

Tobacco & Fitness

- Exercise does not reduce your risk of cancer if you use tobacco.
- **You cant outrun cancer!**
- As few as 3 cig's per day doubles your risk of heart attack.
- *Lite cig's do NOT reduce your risk of heart disease, cancer or any other tobacco related disease, in fact, your risk of cancer and heart disease goes UP with lite cigarettes!*

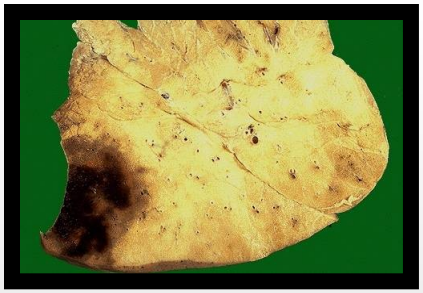
Tobacco & Fitness

- ***Tobacco use is a greater risk factor for heart attack than is being over weight.***
- You would have to be 150 pounds over weight to equal the health damage from one pack of cigarettes or ¼ can of dip every day.

Tobacco & Cancer

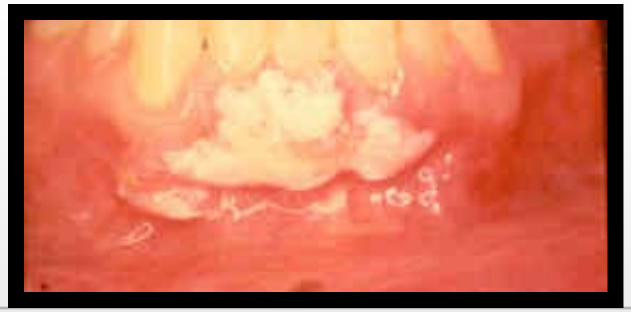
- Bladder (♀ > ♂).
- *Breast (?).*
- Kidney.
- *Lung.*
- Mouth & lip.
- *Pharynx & Larynx (especially if you drink alcohol also).*
- Oral *(especially if you drink alcohol also).*
- *Nasal.*
- Makes prostate cancer worse and lessens the chance of survival.
- Cervix & vulva.
- *Colorectal.*
- Esophagus *(especially if you drink alcohol also).*
- *Stomach (♂ 9x, ♀2x).*
- Liver *(especially if you drink alcohol or have been exposed to Hepatitis)*.
- *Pancreas.*
- Testicular.
- *Acute myeloid leukemia.*
- Endometrial (?).
- *Ovarian (?).*

What Are The Risks?



- *1 in 10* men who smoke will develop lung cancer
- *1 in 5* women who smoke will develop lung cancer
- ***However!!***
- If you are a male smoker and have a parent or sibling with lung cancer, your risk of lung cancer ***doubles to 1 in 5!***
- If you are a female smoker and have a parent or sibling with lung cancer, your risk of lung cancer ***triples to 3 in 5!***

Smokeless Tobacco

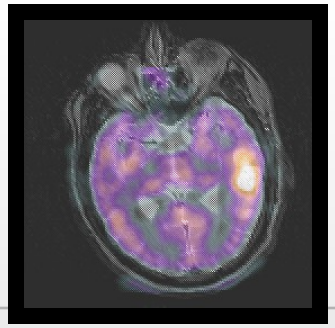


- Over 50% of smokeless tobacco users develop pre-cancerous sores within 3 1/2 years of use.
- *Smokeless tobacco users are 5 times more likely to loose all their teeth, have receding gums and tooth decay due too tooth abrasion from sand and grit in the tobacco as well as the addition of sugar to the dip.*

Smokeless Tobacco

- One can of smokeless tobacco has the same nicotine as over 5 packs of cigarettes (Skoal, Copenhagen & Kodiak have the highest rates of freebase nicotine on the market).
- *One can of smokeless tobacco contains a lethal dose of tobacco if a child or animal eats it.*

Costs Due To Tobacco

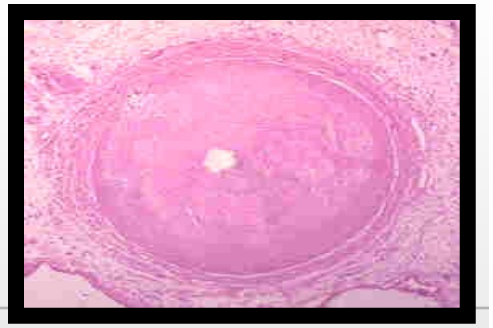


- DOD yearly health costs due to tobacco use is $1.6 Billion due to premature deaths and disability.
- *Tobacco use is the leading predictor of early medical discharge in all branches.*
- The Air Force alone spends enough money in one year to fund one average sized base.
- *60% of Navy personnel use tobacco.*
- 70% of Marines use tobacco.

Tobacco Sales Are Quickly Becoming The Primary Source Of Income For:

- Hamas.
- *Hezbollah.*
- Al Qaeda.
- *It was a primary source of wealth for Saddam Hussein and his family.*
- A single truck load of black market tobacco products equals $2 million in profits for terrorism.

Costs Of Tobacco



- **The actual cost of a pack of cigarettes or a can of dip is *$42!***

Costs Due To Tobacco

- People who earn less money per year, actually spend MORE on tobacco per year when viewed as a portion of their income. If 1 pack/day = $2,200/ year, then…
- An E1 out of boot camp spends 17% of their income (aprox. 1 of every 5 dollars).
- An O10 spends 1.5% of their income.

Costs Due To Tobacco

- People who earn less money per year, actually spend MORE on tobacco per year when viewed as a portion of their income. If 1 pack/day = $2,200/year, then…
- *You also spend more on insurance, health care, wear and tear of clothing & furniture, out of pocket health care, etc*
- You save *less* money as it is going into tobacco, insurance, etc
- *You fall more and more behind every year when compared to people your own age – increasing the amount of stress you feel over financial stress*

The Death Toll

- In the time it took to review this material, 30 Americans died from tobacco use.
- Smoking currently kills 1,200 Americans each day.

- Tobacco cessation will not resolve other problems in your life such as family, school, financial, work or legal problems.
- Those problems, like quitting tobacco, are resolved only through increased coping skills.